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SEABOARD EXCAVATIONS

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DIVISION OF ARCHIVES AND HISTORY
NORTH CAROLINA DEPARTMENT OF CULTURAL RESOURCES
RALEIGH, 1977

THE SEABOARD EXCAVATIONS:

Salvage Archeology in an Urban Setting

by

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North Carolina Department of Cultural Resources

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ACKNOWLEDGEMENTS

There is an unfortunate part about an archeological project. The work is the combined effort of a great number of people, but the report, and therefore the credit, is given under one or two names. In an attempt to correct this situation, the author would like to acknowledge the work of those who do not appear on the title page.

The largest contribution was made by the crew: S. Gayle Russell, Carol Pauk, Ermie Macknee, Brad Owen, and Roy Underhill. These people took the project as their own. They worked under conditions that would have given the average person heart failure. They were dedicated to the point that even a driving spring rainstorm did not make them quit. I hope to have the opportunity of working with them again.

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INTRODUCTION

The scientific prediction of archeological sites has greatly improved in recent years. Numerous predictive models have been developed and tested---some with greater success than others. However, the process has not been developed to the point where sites are not located by accident. This is especially true for the location of historic sites in urban areas.

Aboriginal populations lived in close harmony with their environment. It is possible to predict the location of such population centers by seeking out the proper combinations of naturally occurring features, such as the close proximity of a water source and well drained soil. The technology to adapt to the environment inducing these combinations simply was not available to the majority of aboriginal populations. They had to make do with what nature provided them.

This was not the case with European settlers. When European populations began immigrating to the New World, they brought with them a technology which was capable of radically changing the existing environment. The ability to dig and maintain a deep well was sufficient to open to permanent settlement vast new areas previously denied the aboriginal peoples. This artificial adaptation makes it extremely difficult to predict location by using naturally occurring features.

The problem is further complicated when the supposed location is in an urban area. Construction, demolition, and artificial grade changes often obliterate any evidence of past occupation. Once a site has been graded, the general feeling among professional archeologists is that any remains have probably been destroyed.

The conditions for the presence of archeological remains were far from favorable at the Seaboard Office Building lot. A cursory inspection of the written record indicated that there were several nineteenth-century railroad structures on the lot. The record also indicated that there had been a great deal of later construction on the site including a warehouse built c. 1915, which covered one half of the lot. That structure was later torn down, the lot was graded, covered with asphalt, and used as a parking lot. In short, everything that could be done to destroy archeological remains had occurred on the Seaboard lot.

The Seaboard lot first came under the scrutiny of the Department of Cultural Resources when planned construction of the government mall threatened the Seaboard Office Building. The lot is located in Raleigh, North Carolina, bounded by North and Lane streets on the north and south and by Halifax and North Salisbury streets on the east and west. (See Figure I.) Since

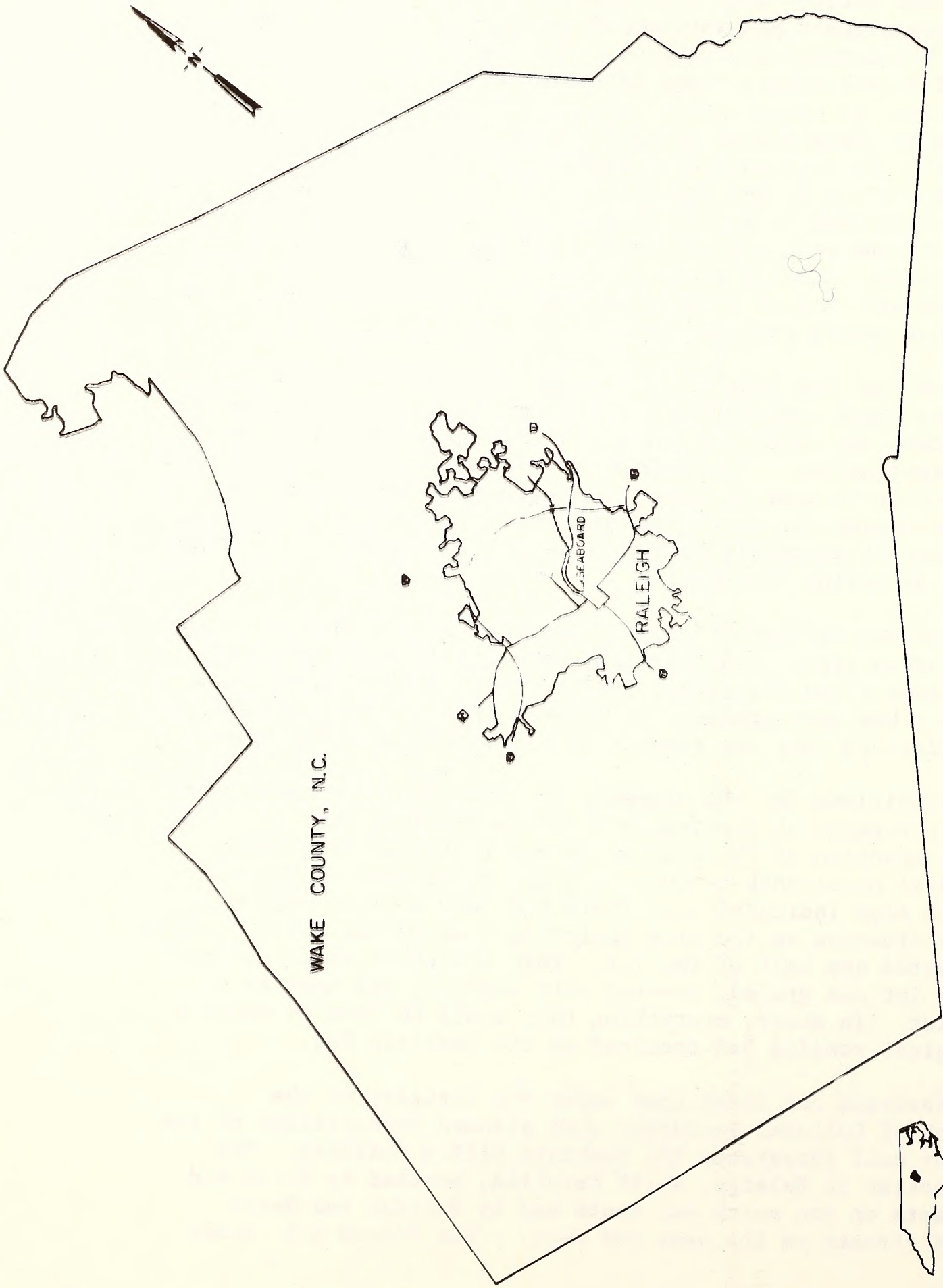

FIGURE I: Location of Seaboard lot.

the property was owned by the State and since state funds were to be used for the proposed construction, a review was conducted to determine its possible adverse impact on historic and archeological resources.

The Archeology Branch, after an on-site inspection, felt that any resources that might have been present on the lot were probably destroyed by later construction. Archival research indicated the presence of the structures, but without any further available evidence the best estimate was that there would be no adverse impact from the proposed construction.

The presence of the Seaboard Coastline Building on the lot and the fact that it was on the National Register of Historic Places brought about a fortunate series of events which led to the discovery of the remains that were investigated during the current project. A group of local citizens, with the encouragement of the Department of Cultural Resources, mounted a campaign to save the structure from demolition. As a result of their efforts, arrangements were made to relocate the building rather than to demolish it. The William Patram Company of Virginia was contracted to move the building to its new location.

Rather complex preparations are required to move a structure the size of the Seaboard Building. The process requires the placing of rails on top of wooden cribbing. The structure is then placed on steel rollers and moved a short distance. Since the rails must be kept perfectly level, elevated areas to be traversed during the move must be excavated. It was during the preparation of one of these areas that a buried feature was located. Although he was not required to be concerned for any archeological resources, Mr. Patram stopped the work and informed the Archeology Branch of his discovery.

An on-site inspection determined that he had located a wooden conduit, which later research determined to be a 1930's telephone conduit, as well as the foundation of a rather extensive structure. Armed with this new data, the possibility of adverse impact was again investigated. It was obvious that some additional testing would be required. That clearance for the work had already been given required making some rather creative arrangements.

The Department of Administration, responsible for the construction work, expressed a certain amount of confusion concerning the excavations. After some explanation and assurances that the Archeology Branch would provide the required funding, they agreed to allow the salvage crew on the site. Construction schedules had already been set, and the work necessary for moving the extant structure had already begun. The author was responsible for accomplishing the necessary archeological work without causing any delay to Mr. Patram or the construction contractor.

Salvage archeology is generally work done "under the gun." There is always a deadline that cannot be changed and no chance to return at a later time. Time was even more pressing for the current project than is usual. The excavation had to be fitted between the building moving and the construction schedules. Work could not begin until Mr. Patram cleared the area to be investigated, and it had to be completed by the end of May. The latter was required by the Department of Administration. It was agreed that excavations would begin May 2, and be completed by May 31, 1977.

Working under these constraints required a great deal of coordination between the excavation team and Mr. Patram. Fortunately, a good working relationship developed very quickly. Excavation could not begin until the area in question was out of the fall area of the extant structure. Test units had to be placed so that Mr. Patram had access to the vast amount of stockpiled materials that were on the site. While these requirements caused some difficulties at first, a plan of attack was soon developed. Materials were rearranged, and new access routes were planned. This required considerable additional work on Mr. Patram's part. Concern for archeological resources is a bit unusual when exhibited by someone outside the historic preservation movement. It is even more unusual when this concern continues when a certain amount of inconvenience and expense is involved.

The result of the negotiations was that the author, with a crew of five, would conduct salvage excavations in specific areas of the lot. It was clear that given the time constraints, it would be impossible to salvage the entire site. In fact, it would be impossible to investigate all the structures that were on the lot. The decision was made to concentrate the excavations in the area where two buildings, from different periods, intersected. While this solution was far from ideal, it appeared to be the most pragmatic. Information about construction technique, building use and size, and possible use patterns might be determined with a minimum amount of ground disturbance. While this limited testing plan would not salvage all the available information, some data would be recovered. Given the situation, it was the only possible approach. It should be noted, however, that a great deal of valuable information was irrevocably lost in this approach.

As is often the case, the concern for information about the Seaboard lot hinged on the presence of an impressive extant structure. Elaborate structures have throughout history been used as an outward display of wealth and success. The extremely ornate vacation "cottages" built along the Newport, Rhode Island, coast in the nineteenth century are a prime example of this phenomenon. Industry is far from immune from this type of display. The Time-Life Building and the World Trade Center in New York as well as the Pentagon in Washington are rather more impressive than is absolutely necessary. Wachovia Bank seems to have an irresistible desire to build the tallest building in every city in North Carolina.

Impressive as these structures are, they are only the end result of the process. In the case of the Seaboard Building, it was the materials that passed through the rather shabby warehouses and loading platforms that funded the construction of the building that was nominated to the National Register. The office building was recorded and saved. The freight houses were constructed, used, and torn down when they were no longer serviceable. The only evidence of the industry that supported the elaborate structure with the bronze plaque lay hidden by several feet of parking lot preparation and a few inches of macadam.

HISTORICAL BACKGROUND

Travel during the early nineteenth century was at best uncomfortable and at worst dangerous. Early travel accounts are filled with tales of entire wagons disappearing at river crossings and of horsemen wandering for days, lost in unfamiliar territory. Elkanah Watson, after spending an uncomfortable night "sleeping in the wilderness," awoke at dawn to discover he was camped on the outskirts of New Bern. The bewildered gentleman stumbled into town commiserating himself for needlessly sleeping outside but grateful for having reached his destination at all.

Travelers often risked injury or even death on the ill-defined paths that served as roads for most of the country. The vagaries of the weather were a constant threat. A sudden rain storm would turn a well traveled trail into a sea of mud bogging down wagons and coaches. What was one day a safe river crossing could suddenly become a raging torrent. The traveler had the choice of waiting out the weather or taking his chances.

The movement of agricultural products and manufactured goods depended upon the same system of inadequate roads and trails. Since the loads were heavier and the wagons generally larger than those of the average traveler, the problem was greater. While a bogged down coach might be pushed out by the passengers, a load of corn or tobacco could provide no help for the unfortunate teamster who found himself in a similar circumstance.

If anything, the situation in North Carolina was worse than usual. The natural environment has dealt the State an unusually hard blow. There were only seven rivers of sufficient size to support any major flow of commerce. Even the use of these was restricted by their natural features. Three emptied into shallow sounds. Two flowed into South Carolina. While Edenton and New Bern were leading commercial centers, and even after the rise of the Wilmington port continued to import and export a sizeable portion of North Carolina goods, South Carolina was the most practical means to transport goods to market. There had always been a certain amount of forced cooperation between the two states. However, there was little desire on the part of North Carolina to fill another state's coffers with export taxes.

River-based commerce and travel combined with the wagon trails and the all too few plank roads was sufficient to support North Carolina in the early nineteenth century. The majority of the population was involved in agriculture. There were several small centers of commerce, but these were extremely limited. It soon became apparent that little progress could be made beyond this pastoral economy unless a new transportation network was developed. The rapid development of Norfolk, Virginia, and Charleston, South Carolina, which were rapidly diverting trade, added impetus to the situation.

While most of the population was bemoaning the fact that the Lord would not make the rivers run where man needed them, the citizens of Raleigh stumbled over the answer. However, it is probable that no one realized it at the time. The construction of the new State Capitol Building in Raleigh required that a large quantity of rock be transported from the quarry east of town to the building site. The distance involved combined with the size of the stone made it difficult to move the material by wagon. In 1833 the State constructed the Experimental Railroad to move the materials. The result was far from dramatic. The iron-capped wooden tracks ran slightly less than two miles from the quarry to the end of New Bern Avenue, and then west to Capitol Square. The cars were drawn by draft animals. While the Experimental Railroad was not impressive, it did prove that quantities of heavy material could be moved overland.

The first real step toward rapid overland transportation was taken shortly after the construction of the Experimental Railroad. The chartering of the Wilmington and Raleigh Railroad was greeted with great enthusiasm. However, its great promise was never realized. The terminus was then shifted to Weldon, and construction was begun. A short year later, a special act of the North Carolina Legislature incorporated the Raleigh and Gaston Railroad, December 21, 1835 (Laws of North Carolina, 1835, Chapter 25, Page 17, Book of Charters, Page 200, Law Library G.C.). Construction had to begin within two years, and the 84 miles of track had to be completed within ten. Construction was begun on November 1, 1836, in Gaston. The track was again made of wood and capped with iron. It would appear that although the distance from Gaston was far greater than that from the quarry, technology had not advanced as quickly as ambition.

By 1838 work had progressed to the point where the company was considering a location for the depot and warehouse near the terminus at Halifax Street in Raleigh. "It is intended to erect here, sometime during the present year a commodious warehouse and the necessary workshops" (Second Annual Report of the Raleigh and Gaston Railroad Company, January 22, 1838, page 29 in W. C. Tucker Collection P. C. 1895).

As is usually the case with construction projects the size of the Raleigh-Gaston Railroad, there were unexpected delays. The plans for the proposed workshops were not completed until 1839. Construction costs were estimated at $20,000. It was noted that construction would be delayed awaiting official word from the board of directors. However, it would appear that there were concerns other than approval of the board. It was not until after January 7, 1839, when the Legislature of North Carolina authorized the endorsement of $500,000 worth of 6 percent 20-year bonds, that construction began. Construction was well underway by March 21, 1840. "It (the crowd) moved about 3 o'clock to the depot of the Rail Road, where a dinner was prepared, in a very handsome style, in a large building designed for a warehouse and fitted for the occasion" (The Standard, June 24, 1840).

In these days of the SST and the family car, it is difficult to imagine the excitement caused by the arrival of the first train in Raleigh. All that we can see of the former glory of the rail system is the rapidly decaying Amtrac station and the Seaboard Coastline Office Building, moved from its original location and preserved only after a long campaign. However, in 1840 things were different.

> HUZZA! HUZZA! HUZZA! The Raleigh and Gaston Rail Road is coming and make no mistake. The passenger cars are expected here tonight, and we jolly Cits can now amuse ourselves with Rail Road incidents, until the Assembly meets. (Raleigh Register, March 24, 1840.)

The era of rapid transportation had been introduced to North Carolina. There were those visionaries who could see beyond the line from Raleigh to Gaston.

> New York shall be only six or eight days journey from New Orleans, not only for a rich class travelling in a privileged manner, but for every shopkeeper and every workman, separation will be no longer possible. Great distances will have disappeared, and this colossus, ten times larger than France, will maintain its unity without effort.
> (Chief Engineer's Report, Raleigh and Gaston Railroad Company, May 30, 1840.)

The railroad had made its impression on Raleigh, but the young industry was not without its growing pains. Although construction of the warehouse had advanced to the point that the March, 1840, banquet was held in the structure, it was not completed by the following year. "Smith shop, warehouse, offices, etc., at Raleigh are yet partially completed...Several hands are now employed in erecting a suitable Carpenters Shop, with a view to the manufacture of our own freight cars" (Fifth Annual Report of the Raleigh Gaston Railroad Company, June 7, 1841, pages 5-6 in W. C. Tucker Collection). It must be assumed that work proceeded apace after this time. In 1847 the Raleigh-Gaston Company owned a rather impressive array of structures located on three acres in Raleigh. These structures included: a wooden depot 30 x 70 feet; a brick warehouse 100 x 100 feet; a machine and smith shop 90 x 90 feet, also brick; and a wooden carpenter shop 24 x 60 feet (from Comptroller's and Treasurer's Papers - Internal Improvements, Raleigh and Gaston Railroad, Box 37).

The 1847 J. W. Johnson map of Raleigh shows two structures on the lot in question. (See Figure II.) Although the scale of this map is somewhat suspect, it is possible to identify these structures.

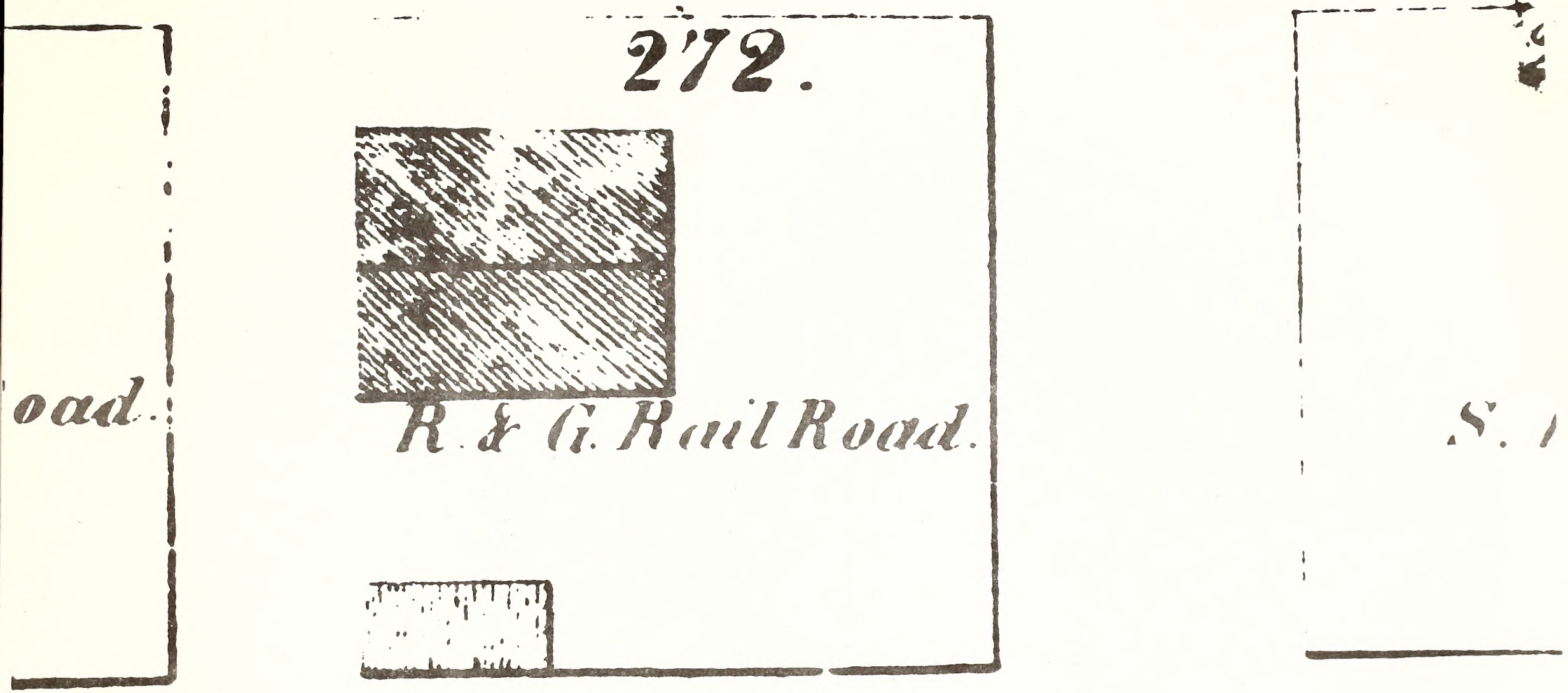

FIGURE II: J. W. Johnson's Map of Raleigh--Section showing Seaboard lot.

The first and smaller of the buildings, located at the corner of Salisbury Street and south of North Street, probably represents the brick warehouse. Once the construction was completed, the structures disappear from the record for some time.

The next mention of construction on the lot in question concerned what is currently known as the Seaboard Coastline Building. Although work on this structure was begun in 1860, it was not completed until 1862: "The office at Raleigh, much needed... is now in progress... we expect to have it finished by the first of January, 1862" (Proceedings of the Eleventh Annual Meeting, July 4, 1861, Raleigh and Gaston Railroad Company). The company officials were not disappointed; the next stockholder's meeting was held in the completed brick building.

By 1870 the warehouse and carpenter shop had fallen into disrepair and required work. The warehouse was enlarged, and the carpenter shop was torn down. A large coach shed, 225 x 42 feet was built on the lot. The 1882 map of Raleigh shows three structures which roughly compare to the written description. There can be little doubt that the square structure at the corner of Halifax and North streets represents the office building. Although the measurements do not agree with the historical maps, the more southern of the two structures facing on Salisbury Street probably represents the coach shed. The larger one to the north indicates the warehouse. Although the accuracy of the representation is somewhat questionable, Drie's 1872 Bird's Eye View of Raleigh sheds some light on the appearance of these later structures. (See Figure III.) It indicates two five-bay structures with gabled roofs. They appear to be built extremely close together or share a common wall. The representation of the coach shed shows railroad tracks entering the structure on Salisbury Street, and there is a long addition at the rear of the building. As previously stated, the scale of the drawing is very doubtful, but it can be used as supportive evidence for structural detail.

The second group of support structures were replaced sometime in the early 1900's. Improvements in rolling stock, freight handling, and a general increase in the amount of traffic required much larger and more modern facilities than could be housed in the old structures. All the millwright facilities were moved across Salisbury Street and were centered near the roundhouse. The office building continued in use, and new warehouse facilities were constructed. The resulting structure must have been impressive for its size alone. A 1949 insurance map indicates a building 135 x 138 feet. (See Figure IV.) It covered half of the area available on the block, completely overpowering the older office building. As the use of the rail system in the United States declined, this structure was no longer needed and was razed. The resulting space was utilized as a parking lot until work on the mall began.

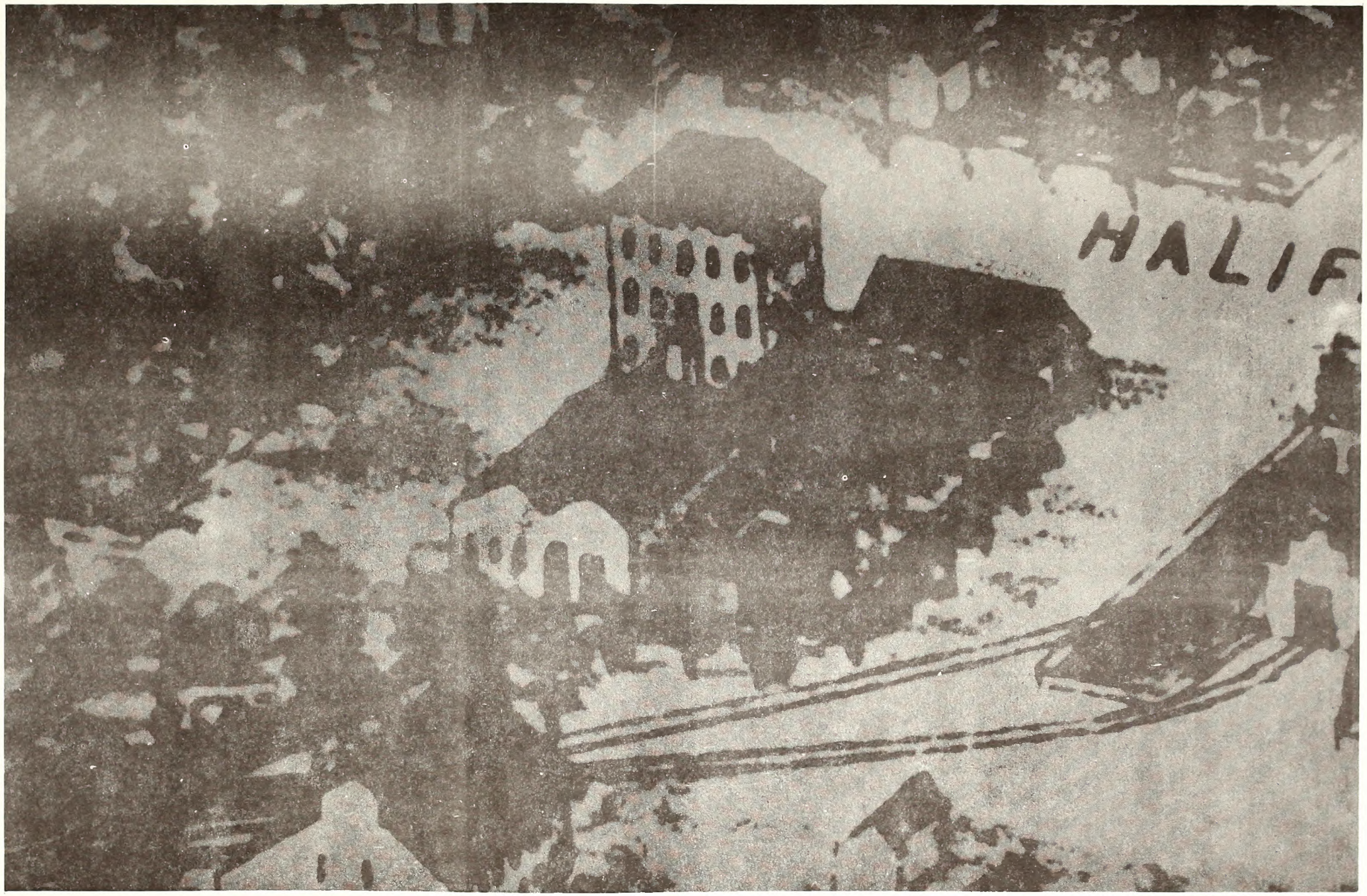

FIGURE III: Dries' Bird's Eye View of Raleigh--section showing Seaboard lot. The three-story structure is the Office Building. The low structure immediately in front represents Feature 3.

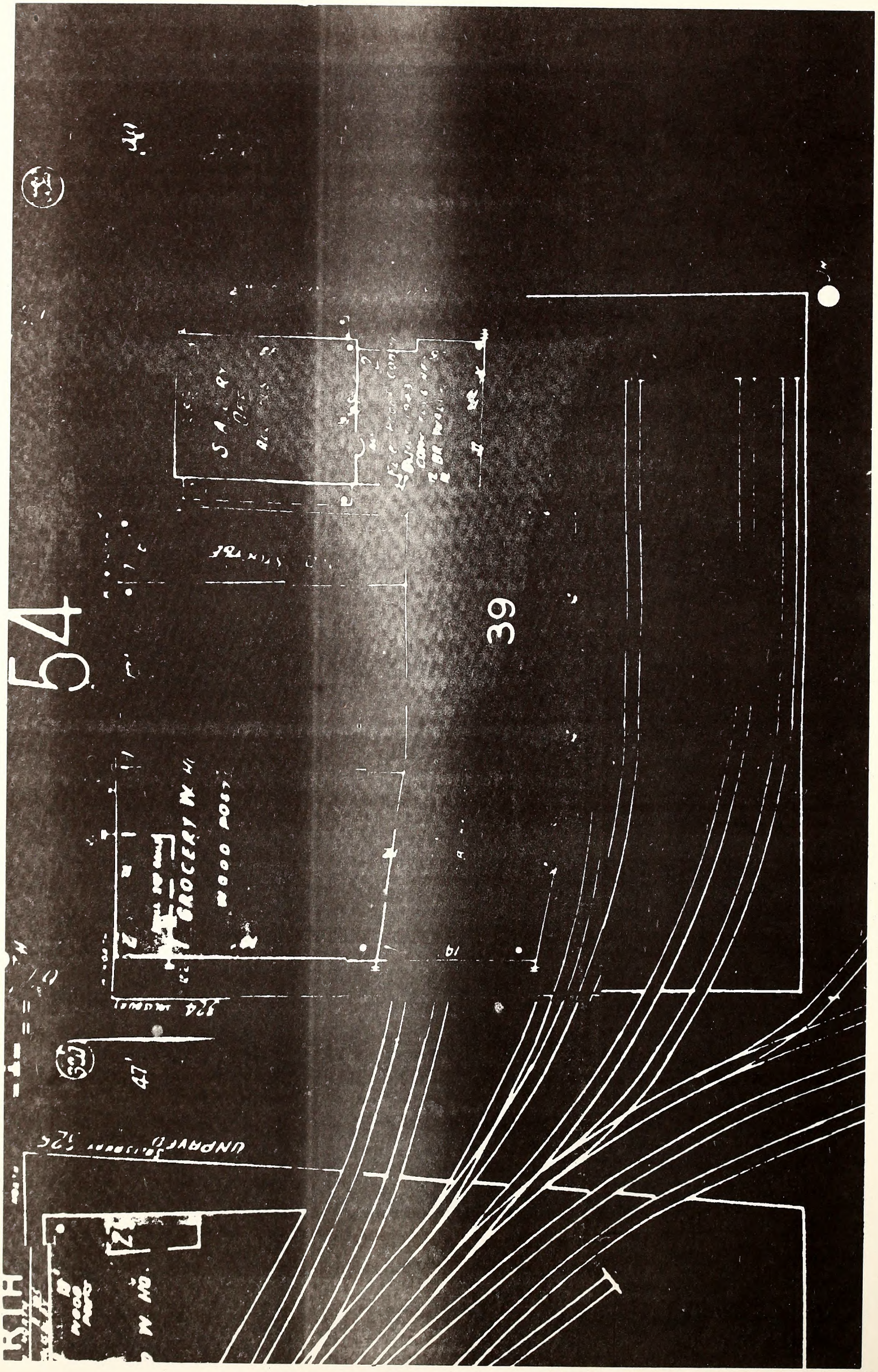

FIGURE IV: 1949 Sandborne insurance map of the Seaboard lot.

METHOD OF EXCAVATION

The time restraints placed on the project combined with the somewhat unusual condition of the site required a rather dramatic departure from the normal methods of excavation. The immediacy of the danger to the archeological resources precluded extensive historical research into the lot in question. The grading and asphalt covering for the parking lot eliminated the usual surface indications for buried features. This grade preparation also eliminated the possibility of subsurface probing as well as the use of some more sophisticated methods of remote sensing. In addition, the level terrain and the lack of landmarks made orientation on the site extremely difficult.

While extensive documentary research was impossible, it was clear that all readily available maps and renderings of the area would have to be inspected. If there had been sufficient opportunity to collect more documentary evidence, the excavation planning would have been simpler. The headlong rush of deadlines, however, allowed for only the most cursory inspection of the written record. Fortunately, the author had access to two extremely proficient historical researchers, employed by the North Carolina Department of Cultural Resources, who were willing to take on the additional work. The four historic maps plus several pages of references to the structure on the lot in question, all located within two days, provided a starting point.

Since the maps were all drawn to different scales and since the scales were rather small, it was difficult to compare the available data. Therefore, the maps were all redrawn to the same scale, somewhat larger than original. While this procedure simplified establishing the relationship of the various structures on the site, it was still impossible, using these maps, to determine their exact locations. The size and location of the block in question was slightly different on each map. There are three probable explanations for this: the actual size of the block may have changed during the period covered by the maps, the maps may have been drawn with different degrees of accuracy, or there may have been an error in the recalculation of the scales. The last of these possibilities was tested by reworking the data. Little difference was noted. The discrepancies were probably caused by a combination of actual change and mapping error.

The Seaboard Building was the only structure on any of the maps with visible remains. By noting the relationship between the building and the current location of the corner of Halifax and North streets, it was possible to estimate the locations of subsurface features. This procedure indicated that the corner has been drifting to the northeast for some time. This change of location is not unusual when one considers the numerous changes in street widths that take place in a populated area.

Projected locations for buried features were estimated by using North and Halifax streets and the foundations of the Seaboard Building as references. Distances were measured from the existing curb lines using 100-foot tapes, and locations were marked with survey flagging secured to the asphalt with tacks. The result was a series of lines and corners that indicated probable locations for buried features. While this method was extremely helpful for indicating overall patterns when viewed from a distance, it was difficult to remember relationships when right on the marks. This problem was solved by writing the map reference on the flagging with an indelible marker. This physical transferal of map information was a great aid in planning excavation units. It was possible to pinpoint probable wall intersections and corners. The careful location of excavations maximized the information recovered while minimizing the disturbance to work already in progress on the lot.

The asphalt parking lot preparation made it impossible to physically stake out a grid system for the site. Even if such a method had been feasible, the presence of the structure moving crew and their equipment would have prohibited such action. The contractor required the majority of the lot for material storage, equipment movement, and building right-of-way. The forest of stakes that would have been necessary to properly place a full grid system would have precluded any free movement on the lot. However, some system had to be devised to record horizontal locations.

A modified, skeletal grid was used to solve the problem. A bench mark (set by a private surveying company) was located near the corner of Lane and Halifax streets. All measurements, both horizontal and vertical, refer to the point represented by this bench mark. A line was surveyed north from this point, parallel to Halifax Street, and stakes driven every 20 feet. A 90 degree turn was made to the west 500 feet north of the bench mark. Points around the site could be located with the use of a transit and this partial grid. While the system may seem rather cumbersome to anyone familiar with the normal grid system, it eliminated the need for large numbers of stakes in the working area, allowing for free and easy movement of equipment and material.

Although arrangements had been made for the use of heavy equipment to remove the asphalt in areas to be tested, access to the equipment was limited. An attempt was made, therefore, to verify that buried features were indeed located in areas indicated by the maps. A bucket auger was used to test the subsurface. In most cases, the auger samples could be taken in areas where the asphalt had been removed by previous activity on the site. In a few cases, it had to be removed with a pick prior to sampling. While this method failed to locate positively any buried features, the stratigraphy that was revealed indicated that some structural remains were still present.

Three areas were selected for intensive testing. One was in an area where the maps indicated that there would be an intersection of two walls and the corner of a building. Another was in an area that should have contained the back wall of one of the structures. The third area was selected by noting the location of the exposed features. In a rare moment of insight, it was determined that one of the simplest procedures would be to chase out the exposed walls. The contractor's bulldozer was brought in to strip off the asphalt. Rather than plunge headlong into something that had not been properly tested, the augering procedure was reimplemented. One hand-excavated 10 x 10-foot test pit was begun as an additional test.

The augering indicated the presence of several feet of industrial fill, largely composed of cinder and coal slag, with a covering of parking lot preparation. The test pit was soon abandoned when it was determined that there was a minimum of four and a half feet of fill in that area consisting largely of cinder. Anyone who has attempted to pierce a layer of this compacted material will understand why the test was abandoned prior to completion. Although while both augering and the test pit indicated the presence of buried features through brick rubble and auger refusal in some areas and the discovery of a reasonably modern concrete feature in the test pit, no solid evidence for nineteenth century structural remains was discovered.

The continuation of the exposed feature was not much more successful. (See Figure V.) The foundation that was exposed formed a "T" shape, oriented to the cardinal points of the compass. The exposed feature disappeared into the overburden to the east, west, and south. When the entire feature was exposed, it was noted that the three legs of the "T" each extended approximately 15 feet before they disappeared. The termination of the foundations indicated that this was a process of earlier rather than later construction.

At this point the excavation was, for all intents and purposes, back where it started. The only thing that had been determined was that there was a great deal more overburden on the site than had been previously suspected. This eliminated the use of the available heavy equipment for anything other than simply removing the parking lot covering. The test trench would have to extend beyond the available space to allow the bulldozer to dig to the required depth. The amount and type of the material as well as the time factor precluded extensive hand excavation.

It soon became apparent that the only method that could be employed was extensive use of a backhoe-front end loader. After checking with numerous state agencies and discovering that no one had any equipment available for an extended period of time, some discussion was made about backing off the site until actual construction was begun. There was the possibility that the salvage could be conducted during the excavation for the parking deck. This was

FIGURE V: Foundation of modern warehouse, Feature 1.

far from ideal as the salvage would have interrupted the construction schedule, and the movement of heavy equipment around the site would have endangered the excavators.

Fortunately, private enterprise came to the rescue. The Case Power Equipment Company of Raleigh, North Carolina, agreed to donate a "Construction King" backhoe for as long as necessary. The equipment that was delivered on the site was brand-new, having less than one hour of operating time indicated when it was delivered. As the author had previous experience in the operation of such equipment, he was to operate the backhoe. After a brief break-in period, the Case personnel left the site, asking only that they be called if there were any questions or problems. The donated equipment was as easy to work with as the personnel of the Power Equipment Company. If it had not been for their unselfish cooperation, the project would have been a complete failure.

The excavation procedure was stripped to the absolute minimum. The backhoe was used for the vast majority of the actual excavating. Small, selected areas were hand-excavated in an attempt to discover the sequence of the artifacts on the site. However, artifact recovery and analysis had an extremely low priority. The main thrust of the excavation was the interpretation of construction details for the structures and determination of their use. As the maps indicated that there had been an unusual amount of construction on the site, there was an attempt to determine the sequence of construction activities. This last goal was given a rather low priority, as it was felt that a great deal more excavation would be required to determine this than was possible.

Two people were necessary for the proper use of the heavy equipment--an operator and an observer. The observer, with a great deal of faith in the operator's abilities, would follow closely behind the bucket watching for the appearance of features and giving hand signals in sensitive areas. This method became so successful that by the end of the project, excavation moved directly from backhoe work to trowel work. Shovels were only employed to push earth from corners and wall bases. It was possible, with a little practice, to "feel" a buried feature with any strength of construction. There were the inevitable accidents. At one point, the author was working through an area of brick rubble. One of the cuts was made with a little too much enthusiasm, and an interior brick wall was cut through. It should be noted that even this was not a major catastrophe, since the wall was left intact on either side of the bucket cut as well as below the path of the machine.

At first it was felt that due to the use of heavy equipment, any provenience for recovered artifacts would be questionable at best. In fact, there was even some consideration given to the possibility of not collecting any material at all. However, as the excavation progressed, it became evident that it would be possible to assign rough proveniences to the material. These proveniences reflected the soil layer from which the material came as well as

the relationship to the structural remains. Once the structural remains were discovered, the material was collected reflecting its provenience as either exterior or interior, and in some cases even as to areas of the interior. In the case of test pits that were hand-excavated, artifact provenience was recorded according to accepted excavation methods.

Since the excavation had to proceed so rapidly, and there would be little or no possibility of studying the remains at the conclusion of the excavation, a complete photographic and drawn record was kept of the entire project. Features were photographed as soon as they were exposed sufficiently for details to be noted. At least one soil profile was made of each excavated area. In addition, soil profiles were drawn for areas that had been excavated during the process of moving the Seaboard Building. Overall site pictures were taken from the roof of a neighboring office building. These proved extremely useful in determining the overall pattern of the structural remains.

Prior to the arrival of the heavy equipment, one section of wall had been located. The feature had been exposed to its base for a length of approximately six feet. After a brief period of practice in an area that did not appear to be too sensitive, the machine was used to chase out the exposed feature for its entire length. As the excavation progressed, it became apparent that it would be necessary to concentrate on one particular structure. While evidence for other features were to be recorded, the main thrust of the project was directed toward the one structure. The entire east wall of the structure was first exposed to the top of the feature, and corners were delineated. Two areas were set aside for hand excavation, one interior and one exterior. Once these test pits were completed, the entire rear interior section of the structure was excavated from the rear wall to a point about 12 feet west. Construction details were noted, and artifact concentrations were mapped and recovered. This procedure revealed the width of the rear of the structure in question.

The needs of the various contractors on the site made it impossible to follow the east-west walls of the structure. The maps indicated that most of the buildings on the lot faced Salisbury Street and that they were right on the curb line. A machine-dug pit was excavated at a point adjacent to the extant sidewalk where it appeared that the north wall of the structure would run. In one of those rare bits of luck that sometimes comes to an archeologist, this pit exposed the northwest corner of the structure. Having located three corners of the structure, it was then possible to interpolate the location of the fourth corner. It was extremely fortunate that the third corner was located on the first attempt as this western pit was excavated on the last day of the project.

Although the site was to be excavated for construction purposes, it was necessary to backfill the area. This was accomplished with the front end loader and took a total of two days. The asphalt

covering for the parking lot, much maligned to this point, simplified this procedure immensely. When the project was completed, all excavations were filled to the present grade with soil that was compacted to the point that it was possible to drive the backhoe across the area without extreme soil displacement. While this procedure was a little more elaborate than is usual for backfilling an archeological site, it was necessitated by the expected arrival on the site of heavy construction equipment.

ARCHEOLOGICAL EVIDENCE

The most surprising point discovered during the Seaboard excavations was the amazing structural preservation in an area which had such a long history of construction disturbance. The extensive filling and grading operations that were carried out on the site were largely responsible for the preservation. Rather than the most common process of "cut and fill", i.e., removal of material from high points and redepositing them in low spots, the vast majority of the material appears to have been imported. This action provided protection for the structural remains. The state of preservation found at the Seaboard lot should make archeologists in the future take a closer look at urban areas. Most have assumed that sites such as the Seaboard lot have been so disturbed that there is little reason for investigation. While this may be the case for most areas, there is always the possibility that fill operations have preserved other sites.

The stratigraphy was relatively uniform over the entire site. The progression of fill layers indicated a long series of filling operations, often restricted to a particular area of the lot. As previously stated, the entire lot was covered with a topping of asphalt. Directly beneath this surface preparation was a six-inch base preparation of modern crusher run stone mixed with red clay and sand. This layer was extremely compact and showed indications of having been set in by heavy equipment.

Beneath this parking lot preparation was a zone that consisted largely of a compacted red clay with numerous brick inclusions. This zone was intruded in a number of areas by localized concentrations of other types of soils. Most of these disturbances were directly related to buried features and will be discussed later rather than in this general discussion. The extremely mixed appearance of this red clay layer was a clear indication that it had been purposely and quickly deposited. The clay was probably used in preparation for the construction of the last series of warehouses that were constructed on the lot.

Beneath this soil layer was a series of different soil types which related directly to localized activities on the site. The composition and thickness of each of these soil types was directly related to the type of activity that took place and the relationship to structures present. For example, soil types that were deposited within once extant structures were quite different than those from the exterior. There was a layer of yellow sand which underlay these differentiated zones. This zone appeared to have been naturally deposited and was found across the entire site. The top of this sand layer probably represents the original ground surface. The history of human activity on the Seaboard lot left a minimum of four feet of deposits.

Since the area along North and Halifax streets was a great deal higher than the rest of the site, it was decided that an attempt must be made to determine the reason for this disparity. Long trenches had been cut around the Seaboard Office Building in preparation for its move. It was a rather simple operation to cut areas of these trenches back revealing a clean soil profile for investigation. The soil levels or zones in this area had little in common with those previously discussed. (See Figure VI.) Again, there was a surprising amount of fill activity. Although the content of the zones varied greatly, they were all of uniform thickness and appeared to have been purposely placed. A number of intrusive elements were present, which added to the general confusion. It was clear, however, that there had been a long progression of intentional filling which began early, and continued to the present. Subsequent cut and fill operations in preparation for the construction of the government mall have now removed this build-up.

Most of the filling operations appeared to have centered along the north and east sides of the Seaboard Office Building. Halifax Street was raised a minimum of three feet prior to the commencement of filling operations on the opposite side of the structure. The fill originally stopped at the western face of the building. During the excavations the remains of a stone retaining wall were located in this area. Although only a small portion of the wall near North Street remained, conversations with the moving contractor indicated that the wall had continued to the Seaboard Office Building prior to his excavations. His preparations had destroyed the rest of the wall.

The stones of the retaining wall were not "keyed" into the foundation of the main structure, a clear indication that the wall was a later addition rather than part of the original construction. There was a large disturbance in the soil immediately to the east of this retaining wall indicating that the wall had been constructed some time after the filling operation had begun. It appeared that the fill was cut back, the wall constructed, and the earth filled in behind the wall. While this operation may seem a little complicated, it would allow the stone mason to work on both sides of the wall--a distinct advantage.

Although no documentation could be found for the following sequence of events, it does explain the physical evidence. The first step appears to have been the raising of Halifax Street. There could have been a variety of reasons for this occurrence, or it might have been the result of continued resurfacing. No investigation of this area was attempted. The fill was tapered along North Street and around the west face of the Seaboard Office Building. The grade appears to have been rather steep. (Note the angle of Zone XII in Figure VI.) This steep angle may have caused erosion problems or severe soil creep. The retaining wall was constructed to prevent the continuance of the problem and to

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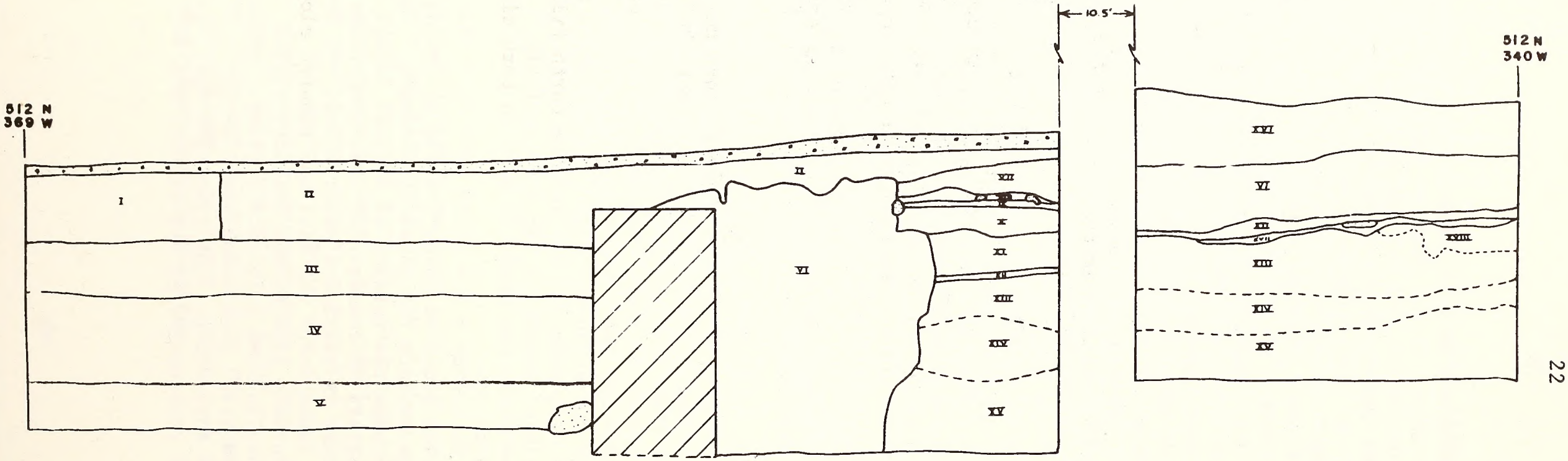
PROFILE OF NORTH STREET BANK



I- TAN SAND-GRAVEL FILL
II- BLACK TOPSOIL
III- MOTTLED RED AND GOLD CLAY RUBBLE
IV- MOTTLED BLACK AND GOLD CLAY RUBBLE
V- MOTTLED GOLD CLAYS AND RUBBLE
VI- MOTTLED GOLD AND TAN CLAYS
VII- MOTTLED DARK GOLD CLAYS
VIII- DARK BROWN SAND AND BRICK
IX- GREY CLAY
X- GREY SAND AND ORANGE CLAY
XI- DARKER ORANGE MOTTLED CLAY
XII- GREY SAND
XIII- YELLOW-TAN SAND
XIV- TRANSITION
XV- YELLOW-BROWN SANDY CLAY
XVI- MOTTLED SANDY CLAY CINDER FILL
XVII- BROWN SAND WITH BRICK
XVIII- MOTTLED TAN, LIGHT BROWN, WHITE AND BUFF SAND WITH IRON OXIDATION

CONCRETE
RETAINING WALL-PINK STONE
ROCK

SCALE
0 1 2 FEET

FIGURE VI: Soil profile of the North Street Bank.

relieve the need for constant cleanup around the structure. At some later date, the elevation of Halifax Street was again raised. North Street was also elevated, and the slope was tapered all the way to Salisbury Street. This procedure added an additional one and a half feet to the grade of North Street and buried the retaining wall.

Remains of five structures, including those of the Seaboard Office Building, were located during the project. (See Figure VII.) Since the foundations of that structure were extant during the excavation and quite available, it seemed appropriate to record and interpret them just as any buried feature. This operation would add to the information already available on the structure and would act as a temporal control over other data recovered. The construction of the Seaboard Building was well documented, while that of the other structures was not. It was hoped that, by comparing construction techniques and materials, it would be possible to date more accurately the construction periods of the other structures.

In an attempt to test some of the conclusions that may be made from observation of archeological remains, the field crew was not made aware of the extensive information that had been collected on the structure in question. This procedure also acted as a test, helping determine which members of the staff could best function with a minimum of supervision. The results of this little experiment were extremely pleasing, as the staff interpretations, for the most part, agreed with the documentation.

The foundations of the Seaboard Office Building indicated that a number of additions and changes had been made at various times to the structure. The foundation of the building's original section was brick and measured 55 feet north-south by 50 feet east-west. The bricks were layed in American or stretcher bond, forming a wall two feet thick. The footing for the foundation, visible in one area of the structure, was also brick. The top course was laid with header bond. The footing extended beyond the foundation the length of one brick. As the soil in this area was extremely compact and time was limited, no attempt was made to excavate/to determine any further details. The bricks were standard-sized, machine-made, and high-fired. While the resulting bricks were not as regular as modern brick, they were sufficiently uniform to indicate that they were mass-produced. The mortar appeared to be rather sandy, but it was in excellent condition. The light cement content of the mortar may reflect some shortage of supply at the time of construction or simply the builder's attempt to cut costs.

The most obvious of the additions was a 41 x 50-foot structure tacked on to the south of the main structure. The foundation of this section was of poured concrete rather than brick. The mix was modern, composed of portland cement, sand, and crusher run stone as heavy aggregate. Although the foundations were severely damaged at their junction, it was clear that they were not tied together in any way. The northern extent of the concrete was simply poured against the extant brick foundation.

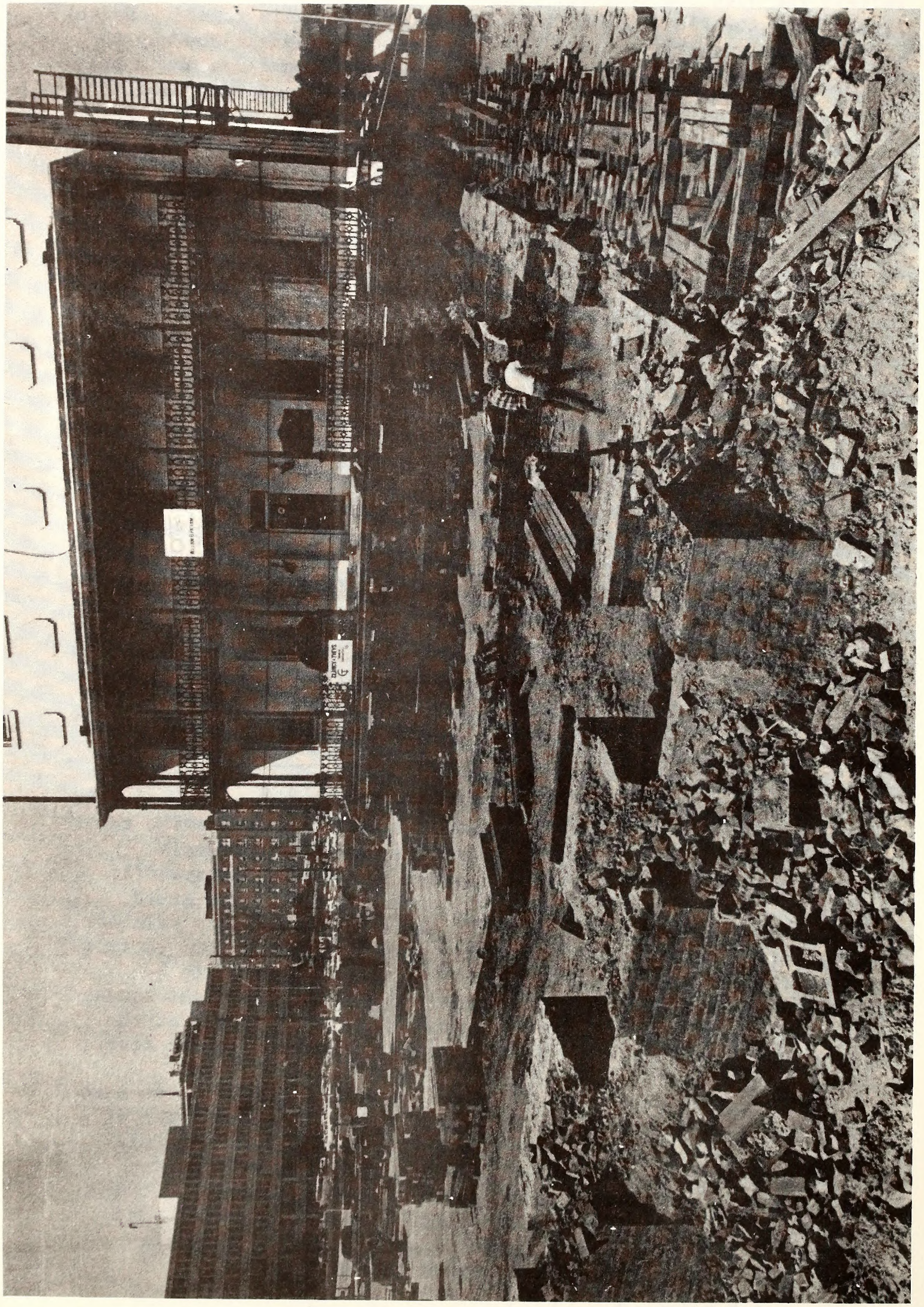


FIGURE VII: Foundations of the Seaboard Office Building.

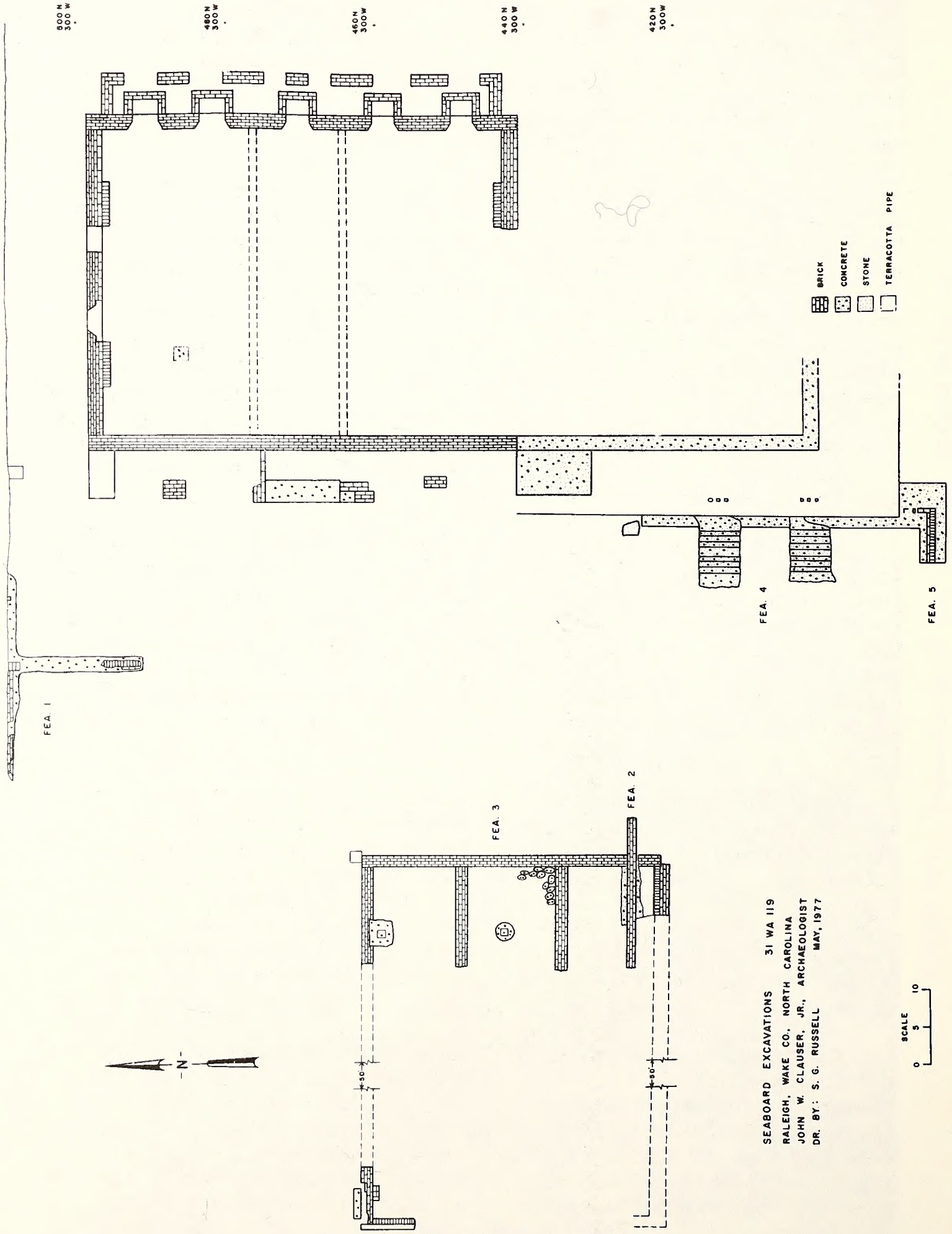
One of the most interesting features of the extant structure was the ornate wrought iron porches on the east and west faces. It was noted, however, that these porches did not seem to fit the overall design of the building. The porch piers were not of uniform size and appeared to have been fitted into an existing structure rather than part of an overall design. These piers represented the base to a rather ornate series of arches that supported the porch which faced Halifax Street. The porch on the opposite side, the west side, was austere by comparison.

The investigation of the porch foundations indicated that both additions had hidden rather impressive architectural features. The Halifax Street facade had a complicated series of niches that were nicely finished and obviously for decoration. However, the porch obscured them. The plainness of the western facade made it a little more difficult to state firmly that a porch was not originally present. The door and window moldings were rather plain, but this might be expected since this was always intended to be the rear facade of the structure. Once again the foundation remains were the best evidence. The material used to support the porch was not keyed into the main foundation. The mortar mix appeared to be slightly different; but since no samples were taken or laboratory tested, this must be viewed as strictly visual and subjective evidence.

The soil stratigraphy and the structural evidence indicated a rather interesting point about the amount of filling that had been done around the Seaboard Office Building. It would appear that the entire "basement" level was exposed when the structure was built. When the current project was begun, there was only approximately four feet exposed on the Halifax Street facade. The impressive original facade of the structure was completely obliterated by the addition of a porch and the accumulation of at least five feet of fill.

While the examination of aboveground remains might appear to be a waste of time or at best a rather esoteric pursuit, the exercise proved extremely valuable. It allowed the field crew to become accustomed to working together without expending a great deal of time and energy excavating. It also offered a chance to learn what might be expected from the buried features. The necessary period of acclimatization to the site was accomplished quite rapidly. During the process quite a bit of valuable comparative data was collected.

The first buried feature investigated was the one uncovered by the moving contractor (Feature 1 in Figure VIII). A simple cleaning of the exposed areas of the feature indicated that the foundation was of relatively modern construction. The footings were composed of a mixture of portland cement, sand, and crusher run stone (see Figure V). The stone was uniform in quality and size and appeared machine-prepared. This mix was simply poured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into an excavation in the ground rather than into wooden forms. Both the mix and the method of construction were of a type that has only recently become accepted by the building trades.

Later excavations located the southern extent of this structure. Although the materials and the techniques used were the same, the foundation in this area was more substantial (Features 4 and 5 in Figure VIII). It was apparent that this area was intended to carry heavy loads without sustaining structural damage.

There were several areas with evidence of brick laid on top of the footings. The bricks were machine-made and of uniform size, color, and hardness. They were obviously of later origin than those utilized in the Seaboard Office Building. Since primary investigations indicated that these remains were of recent origin and time was limited, it was decided that no further investigation was necessary. Subsequent documentary research has determined that the structure represented was a warehouse built in the 1930s. The 1949 Sandborne insurance map indicates that the structure was 138 feet north-south and 135 feet east-west. It was not quite square, having the southwest corner cut. (See Figure VIII.) While the building was probably not terribly interesting architecturally, the size alone must have made it impressive.

Although Feature 4 appeared to have been constructed at the same time as the previously discussed features, considerable time was spent investigating it. The feature consisted of two concrete constructions nine feet long and six feet wide, placed six and one half feet apart. (See Figure IX.) This complex was intended to support a great deal of weight, as it was two and one half feet thick. Since the materials used in the concrete were obviously modern, temporal identification was simple. Determination of function, however, was another story. Indentations, the dimensions of railroad ties, were evenly spaced along both concrete features. It appeared that these marks had been made by the placement of ties in the wet concrete. The close spacing of the ties plus the thickness of the concrete indicated that the feature was not designed to be completely supported by earth.

A definite soil variation was noted when the material within the feature was compared with that outside. The interior soil was composed completely of cinders, while that on the exterior was mixed fill. It appeared that the interior of the feature had at one time been an open pit that was purposely filled with cinders. The complete lack of artifactual material and the absence of observable lensing or layering in the soil indicated that the filling process was quite rapid. Subsequent analysis of the fill material determined that it was composed entirely of coal cinders.

The determination of the development process for the feature had been completed, but the function of the construction still evaded the researchers. A search of some of the more esoteric railroad source materials finally solved the problem. The feature was the remains of an ash or cinder pit.

FIGURE IX: Cinder Pit, Feature 4.

> Ash pits or clinker-pits are required along the main line of a railroad and at terminal and division yards, shop and roundhouse systems, to allow ashes and clinkers collecting in the fireboxes of engines to be dumped, and also, although to a more limited extent, to facilitate the examination and oiling of the engine machinery from below at points where stops are made.
> (Berg 1904:51)

While on the right-of-way the disposal of cinders caused no problems, as they were scattered over miles of track. However, in areas where the train might be stopped for any period, such as at water towers and freight platforms, the buildup would quickly cause problems.

The ash pit was of quite late origin, having been constructed after the warehouse represented by Feature 5. The concrete used in Feature 4 overlay that of Feature 5 evidencing two building periods. There was a marked "cold joint" indicating that the concrete in Feature 5 had dried and cured prior to the pouring of Feature 4. The warehouse was probably standing when the ash pit was constructed, but the ash pit appears to have been an addition.

The first foundation of any temporal interest (Feature 2 in Figure VIII) was the remains of a brick wall constructed on a concrete footing. The bricks incorporated in this wall were machine-made, but they were not as hard-fired or as uniform as those that were in Features 1 and 5. The bricks were layered with six to one American bond using a portland cement mortar mix. (See Figure X.) It was interesting to note that there was more cement in this mix than in that used for the office building. Considering the fact that the feature was located less than one foot below the surface of the parking lot, the wall was in an excellent state of preservation. Although there were clear indications that the area had been subject to hard, machine compaction and rolling during the construction of the parking lot, the wall appeared undamaged. There was no indication of shearing and no hint of crushing even in the upper courses of brick.

The wall was one foot thick extending two feet from the top of the footing to the point of destruction. The construction of the footing was rather unusual. The base was poured into an open excavation in a manner similar to that described for Features 1 and 5. Above this free poured section there was a section of the footing that had been formed up prior to pouring. This formed portion was approximately four inches wider than the brick wall, providing a substantial base for it. The forms had been constructed from four-inch boards rather than plywood as is common in construction today.

The concrete utilized in the footing was a mixture of portland cement, sand, and stone heavy aggregate. The stone was not as uniform in appearance as that found in the other features and was not of equal quality. Although reasonably modern materials and construction techniques were used, it was evident that the feature was constructed

FIGURE X: Feature 2; note concrete footing beneath the brick.

later than originally suspected. The structure represented by the feature was probably constructed between that of the Seaboard Office Building and that of the warehouse, Feature 1 and 5. Subsequent documentary research indicated that this wall was probably part of the structure represented on an 1882 map of the area. The map indicated that the structure, labeled "freight house", was "L"-shaped and had overall dimensions of 182 feet east-west and 72 feet north-south.

When the feature was located, it was felt that it was of sufficient age to be fully investigated. After approximately 20 feet of the surface of the feature had been exposed, work began to determine the depth. During the investigation it was noted that the feature cut through an earlier structure. After the several earlier abortive attempts to locate remains of early railroad structures, there were suddenly too many that required excavation. Although the remains of both structures corresponded roughly to buildings represented on early maps, none matched exactly. There was not enough time to fully excavate one of the structures, much less both. Some sort of priority had to be established for excavation of the features.

Since Feature 2 cut through and was above the latest foundation (Feature 3 in Figure VIII), the former was built after the latter. Realizing a certain prejudice and fully aware that information was being lost, the decision was made to focus on the earliest remains. With some reluctance, the investigation of Feature 2 was abandoned at this point in favor of Feature 3. The small area of Feature 2 that was exposed was not enough to determine the overall dimensions of the structure. However, the fact that the actual location did not agree with the location on the 1882 map would seem to suggest that the dimensions shown by the map should be seriously questioned.

The entire interior of the structure could not be excavated. There was the restriction of time and the fact that the extent of the required excavation would have interfered with the moving of the Seaboard Office Building. By proper planning of excavation units, it was possible to recover the maximum amount of information with a minimum amount of digging. The major portion of the excavation centered along the rear (east) wall of the structure. The entire length of this wall was exposed, revealing the width of the structure and some of the construction details. Once this had been accomplished, a wide trench was excavated across the entire interior of the wall. In addition, selected areas of the exterior were tested. This revealed more construction detail as well as several interior walls.

This operation yielded two corners of the building and the entire length of the rear wall. It was necessary, however, to locate a front corner in order to establish the length of the structure. It was possible to approximate the location of the front corners of the building by sighting along the rear wall and

then by turning a right angle and sighting a line toward Salisbury Street. If the building were square, i.e., the corners were right angles, the front corner should have been along that line. Using the available historical maps and a little intuition, an excavation unit was planned where the line met the eastern edge of the sidewalk along Salisbury Street. A short, and fortunately successful, excavation was conducted in this area on the last day of the project. The northeast corner was located in the middle of the excavation unit. The west wall, the front, ran parallel to Salisbury Street along the eastern edge of the sidewalk. With the three corners of the structure exposed, it was possible to determine the overall dimensions and much of the construction detail. Excavation of the fourth corner was unnecessary as its location could be interpolated in the same manner as the northeast corner location was.

The building in question was constructed with brick, as were most of the structures on the lot. It would appear that the ever present danger of fires inherent with the use of coal burning engines, required the judicious use of frame construction. The bonding used in the foundation was six to one American bond laid up with a rather sandy mortar mix. While the mortar was still holding the bricks in place, severe surface dusting had taken place which removed much of the cement from the mix. Although there was some indication of deterioration, the overall preservation of the feature was excellent.

The footing for the wall was not constructed with concrete as most of the other footings on the site--but brick. (See Figure XI.) The construction technique was the same used in the Seaboard Office Building. Since this wall was below and bisected by Feature 2, which had a concrete footing, it was evident that the brick footing method was an earlier construction technique. The fact that the methods used in the Seaboard Office Building and the structure in question were the same indicates that they were probably built about the same time.

The overall dimensions of the structure (Feature 3 in Figure VIII) were 85 feet north-south and 100 feet east-west, not quite as large as some of the other structures previously discussed. The exterior walls were two feet thick with the footings extending out the length of one brick. The wall construction was rather peculiar. The north and south walls were not keyed into the east wall. It appeared that the walls had been constructed as separate units rather than as part of an entire unit. The southeast corner of the building was offset, leaving a small niche rather than a true corner. At first it was thought that that one of the walls had shifted leaving the niche. However, further investigation indicated that the walls were still in line and that the corner was true. Although no use could be determined for this construction, it appeared that it had existed from the time of construction. It may have been the result of some miscalculation during construction but this explanation must only be considered as conjecture.

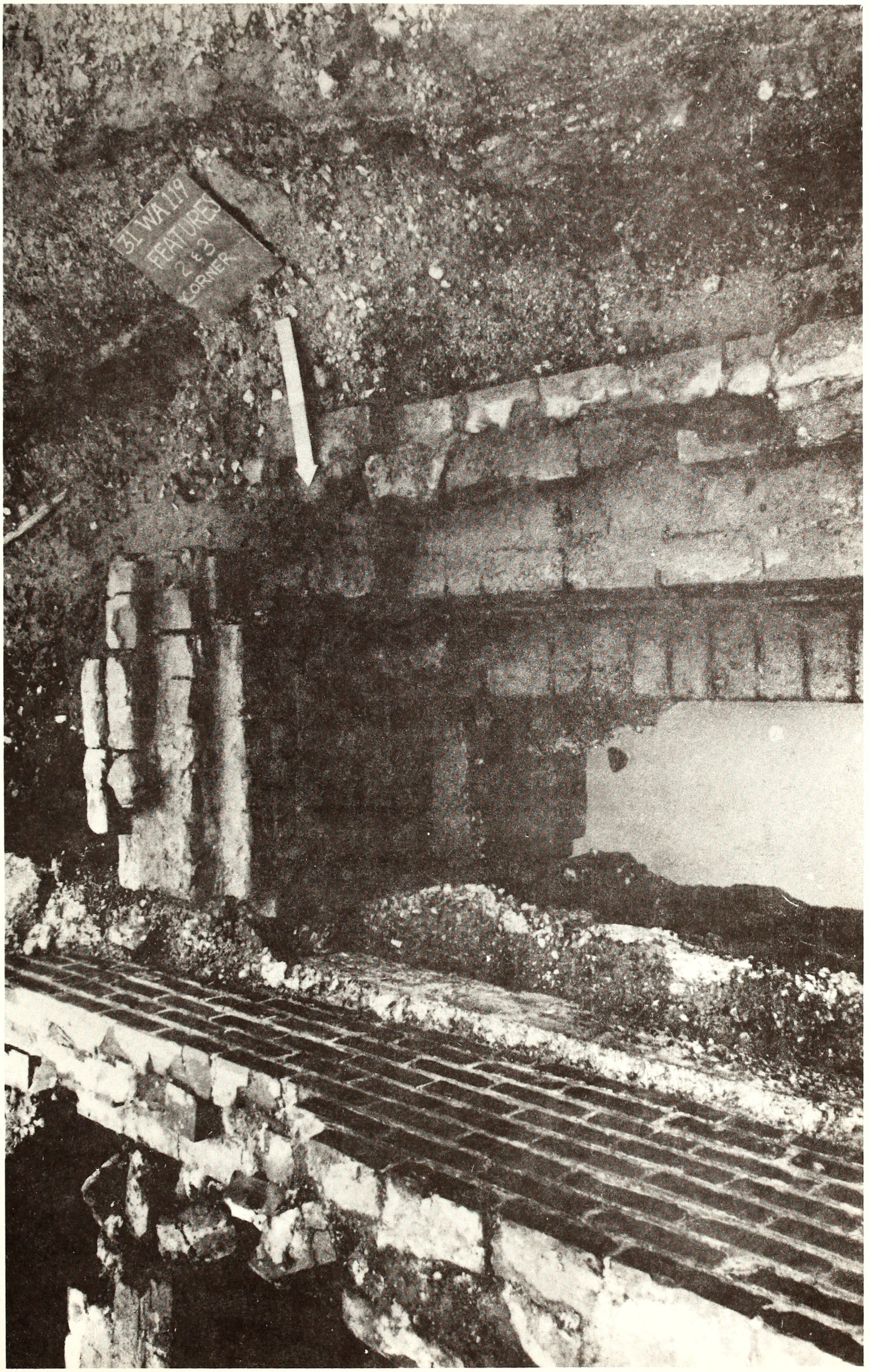

FIGURE XI: Footing of Feature 3, note that footing is brick.

The interior of the structure was divided into three areas by two interior walls which were oriented east-west. These walls were not keyed into the rear wall and appeared to have also been constructed as separate units. If it had not been for the stratigraphic evidence, which indicated that the interior walls were constructed at the same time as the exterior walls, it would have been concluded that they were later additions. One of the dangers in a salvage project is that in the mad rush to gather as much evidence as possible, important details are often overlooked. It was fortunate in this case that the evidence for the building period of the interior walls was preserved.

When these walls were uncovered, it was noted that the tops were flat and had a finished appearance. While the exterior walls showed indications of having been torn down to their present level, it appeared that the interior walls were only constructed to the height that remained. Several lengths of severely decayed wood were found on top of one of the interior walls. These were oriented along the length of the wall and seemed to have been purposely placed. Evidently, they had been used as shims, leveling up a low spot in the wall. Although the walls divided the structure into three bays, it appeared that they never extended above the floor level. They were intended to provide additional support rather than to physically divide the interior of the building.

The northern exterior wall provided some of the best construction detail that was located during the project. Joist pockets spaced one foot four inches apart, were located along the exposed area of this wall. (See Figure XII.) These pockets were one foot high and six inches wide, indicating that the joists supporting the floor were quite large. Since these pockets were located in the north wall, it was evident that the flooring supports ran north-south across the structure. Since this was the case, the floor boards ran east-west at right angles to the joists. The bottom of the pockets were slightly higher than the tops of the interior walls. This shows the use of the wood remains. The wood was used to provide continuous support for the floor supports.

Every attempt was made to provide the floor of the structure with maximum support. The size and spacing of the joists as well as the interior supporting walls indicated that the floor was subjected to extremely heavy loads for long periods of time.

While the main thrust of the excavation was not the recovery of small artifacts, the discovery of such items was inevitable. Since heavy equipment was involved in the excavation, only the grossest proveniences could be assigned to the material. For all intents and purposes determination of vertical provenience was impossible. One simply cannot sufficiently control a backhoe to recover that type of information. However, it was possible to assign horizontal proveniences. This information added significantly to the interpretive data for the structure.

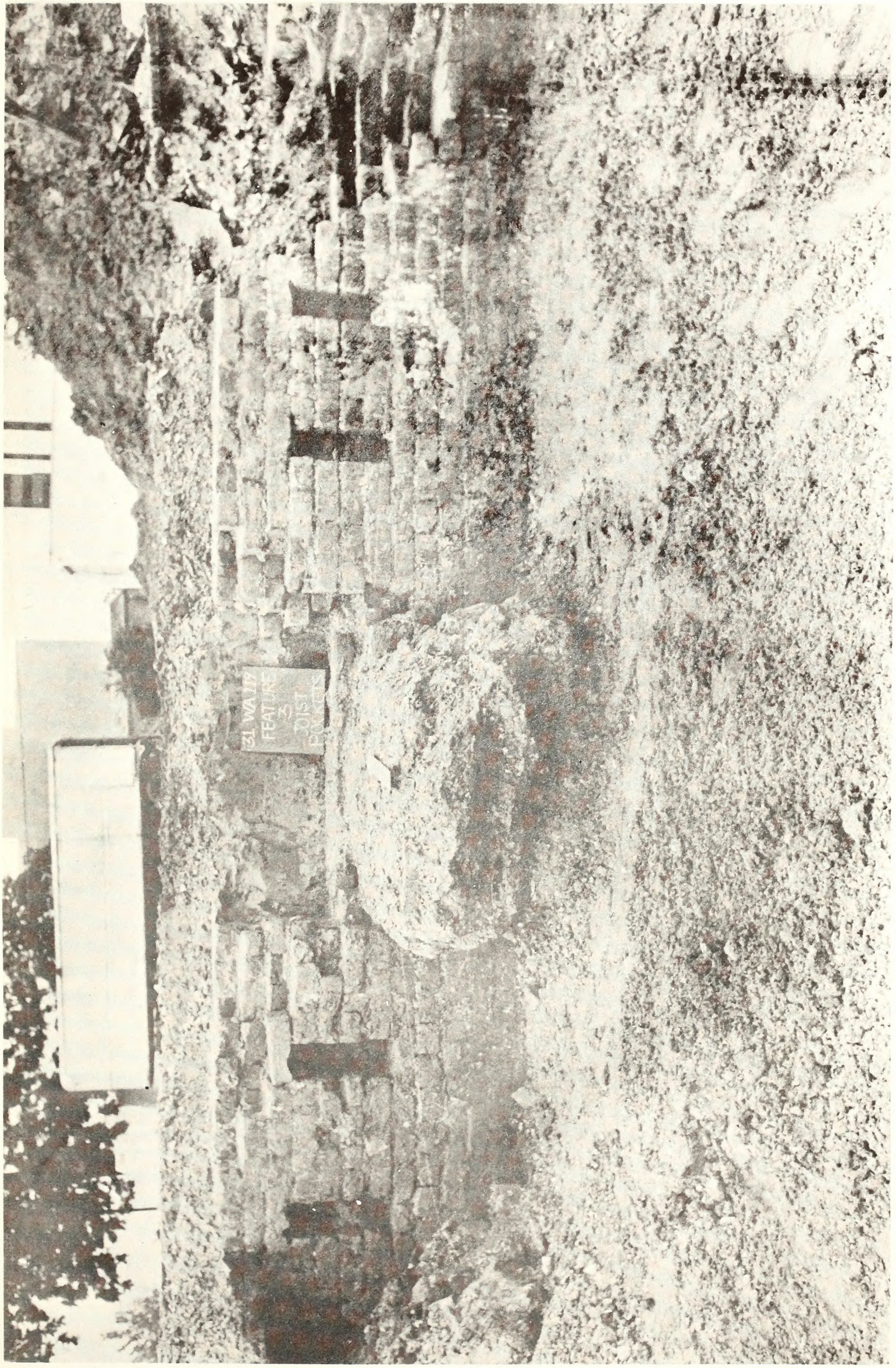

FIGURE XII: Joist pockets in north wall of Feature 3. The concrete in the center of the figure is an intrusive element from a later structure.

Although, as previously stated, the interior walls did not actually divide the building into rooms, for the purposes of excavation, the areas between the walls were considered as such. (See Figure XIII.) The distribution of artifacts in the three areas indicated that they were each used for different purposes. The southern "room" yielded relatively few artifacts. Of those that were present, none were in any greater proportion than the rest. There was, however, a high concentration of processed lime in this area. It would appear that the floor above this area had been used to store bulk lime.

The center "room" indicated much different usage. While excavating this area, large masses of cement were recovered. After two or three had been removed, it was noted that these masses had the impression of burlap on the surface. Closer inspection showed that these items represented bags of cement which had evidently become wet and set up. One of the bags still had enough printing remaining on it to determine that they were reused feed bags rather than ones specially manufactured for transportation of cement. Fifteen bags, all from the center "room," were recovered during the project.

The northern "room" contained artifacts that told a much different story. Large numbers of mineral water and soft drink bottles were recovered from this area. In addition, there were located several examples of fine glassware and machinery parts. (See Figures XIV, XV, and XVI.) It would appear that this area had been used to store smaller items, perhaps those that had been crated. The presence of the machinery parts might indicate that there had also been a millwright shop located in the same area.

While the artifact distribution seems to indicate differential usage within the structure, i.e., loose bulk material to the south, bagged cement in the center, and crated materials to the north, it should be noted that the data is open to question. The method of recovery was rough at best. Also, only a relatively small area of the structure was excavated. The majority of the information was derived from the excavation of the rear of the structure.

It must be assumed that the design was similar throughout the building. Such an assumption is risky at best. It has been the author's experience that industrial structures are often divided, having drastic design changes from one area to another. Areas of such buildings are designed for specific purposes. If there is to be a heavy load on only one area of the building, only that area is given additional strength. There may have been similar changes in the design of the structure in question; however, the written record indicates that the entire building was used as a warehouse. Without evidence to the contrary, one must assume that the same basic design was continued throughout the entire building. As the evidence is now firmly ensconced beneath parking garage preparations, it does not appear that additional evidence will be forthcoming.

FIGURE XIII: Overall view of Feature 3. Objects in center "room" are cement bags uncovered in place.

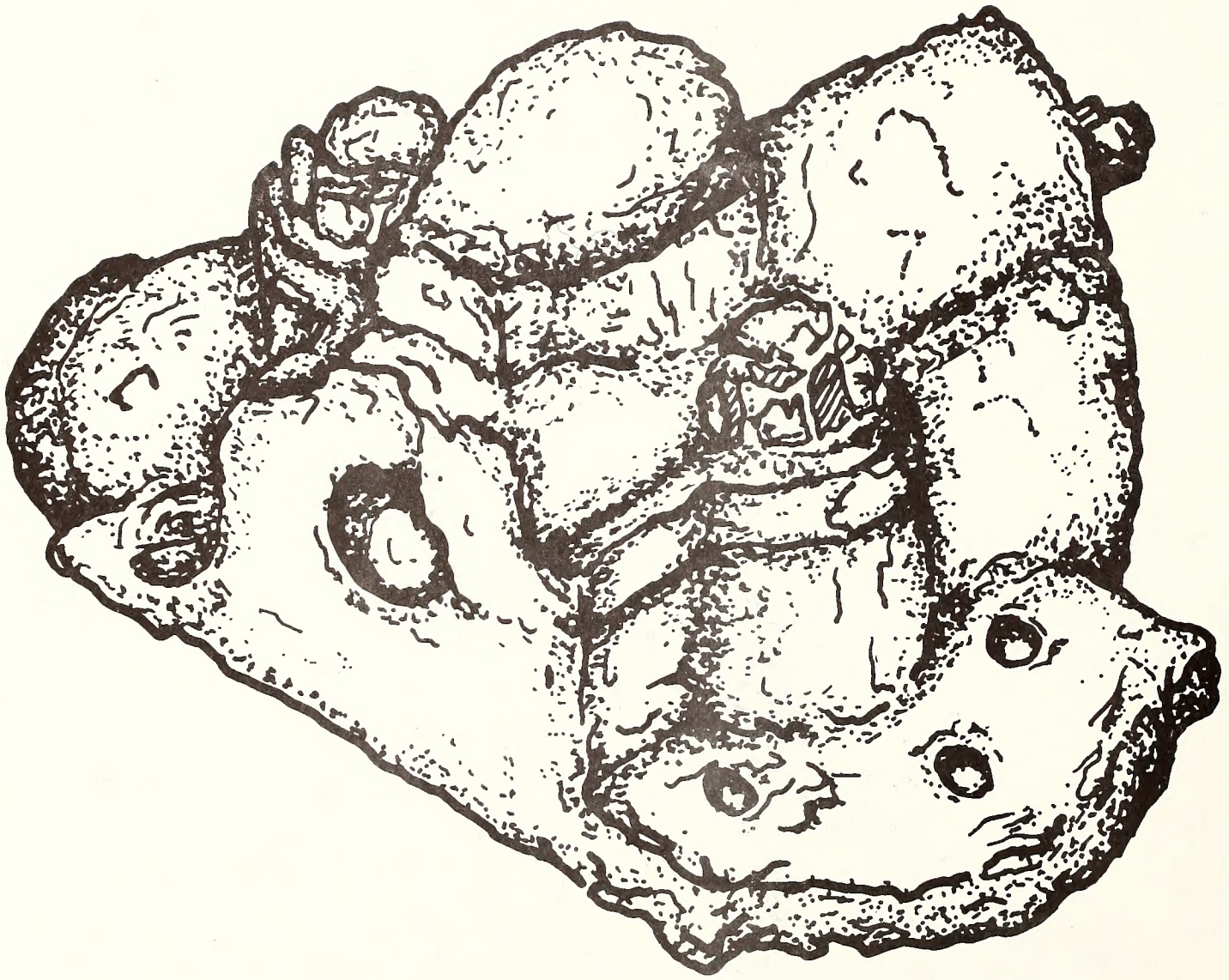

FIGURE XIV: "Pillow Block"--a machinery part used to support a revolving shaft recovered from the north "room" of Feature 3.

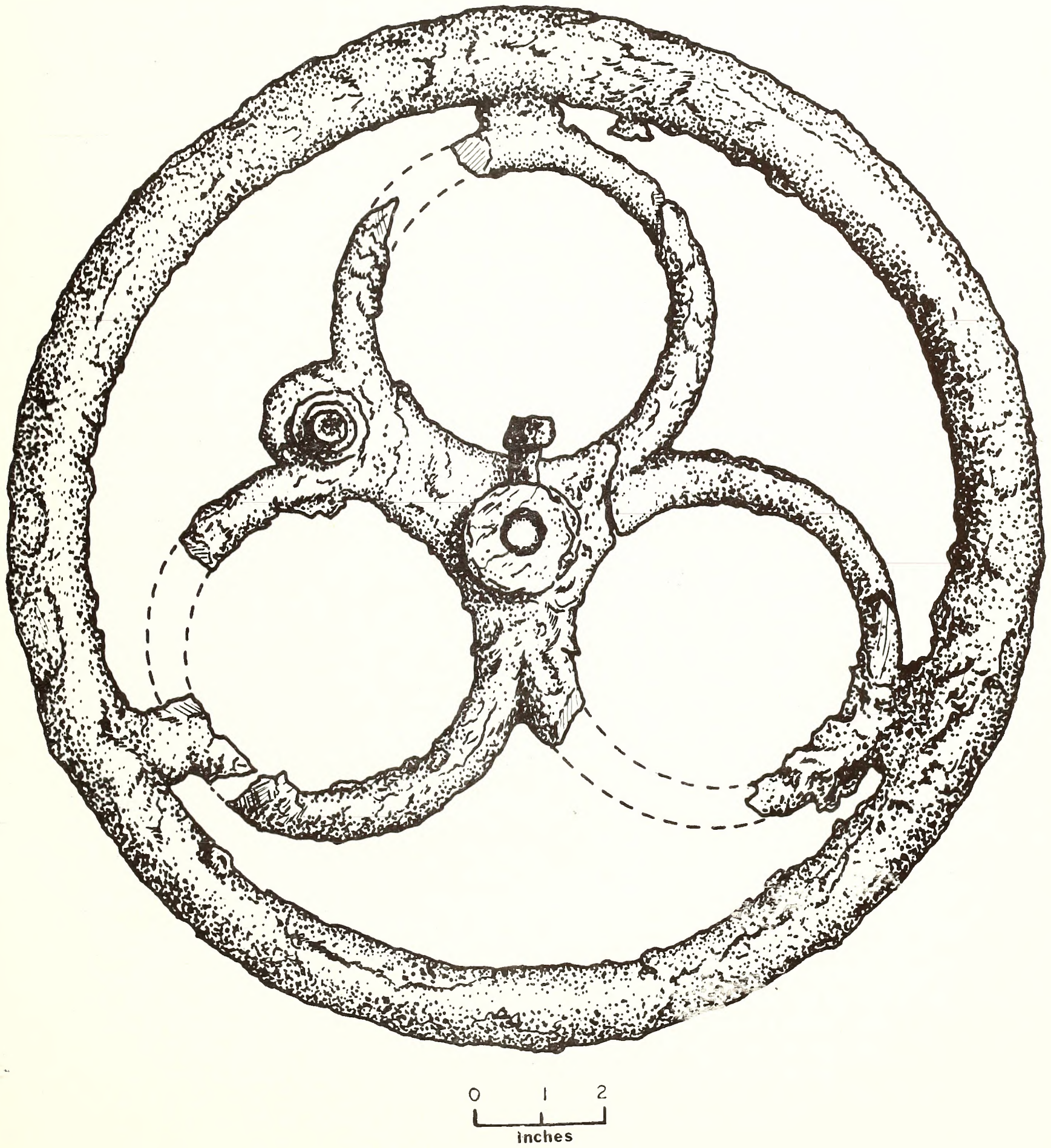

FIGURE XV: Flywheel for foot powered machinery, perhaps a lathe, that was recovered from the north "room" of Feature 3.

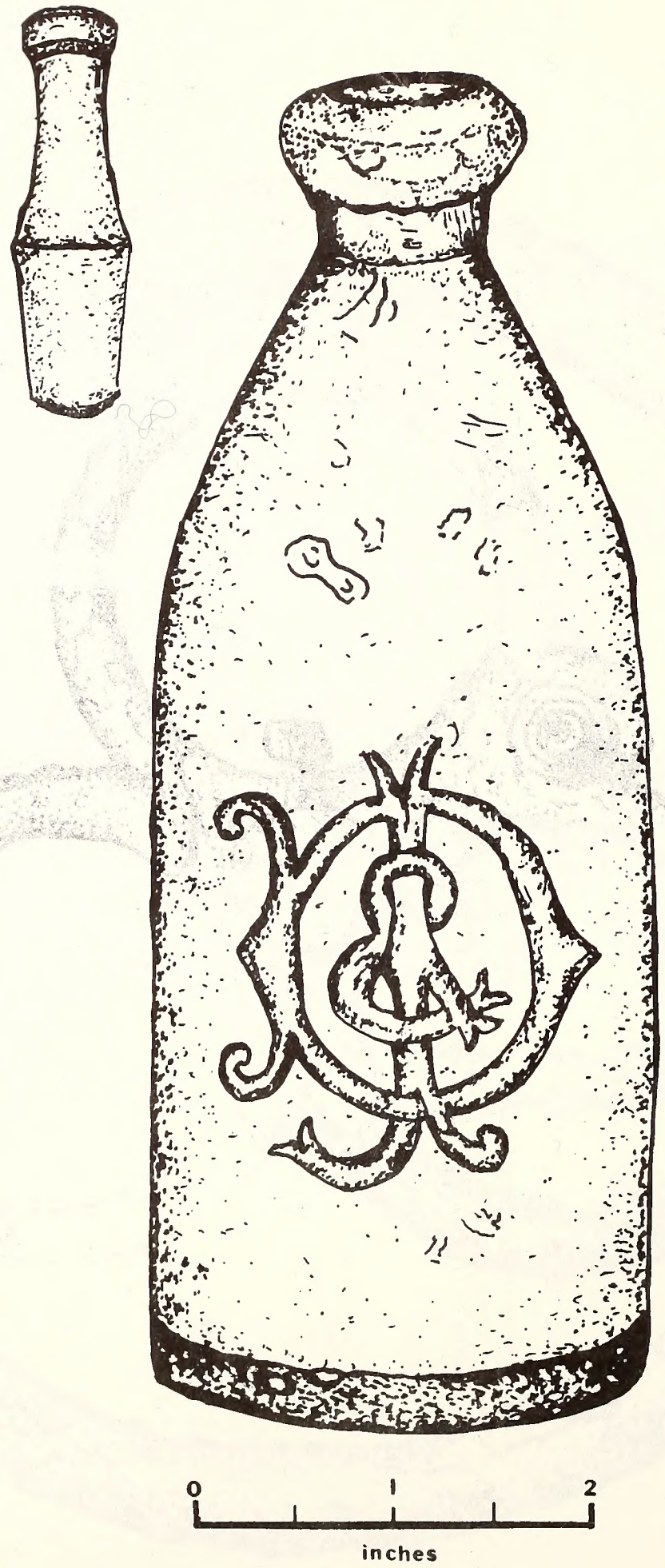

FIGURE XVI: Doepp & Jones mineral water bottle with gravity stopper patented in 1864 recovered from the builder's trench of Feature 3.

There were two intrusive features which intersected Feature 3. These were of extremely recent origin but indicate some interesting construction methods and, therefore, deserve some comment. The two were related to each other, although at first inspection they appeared to have nothing in common. Both were constructed with a modern portland cement concrete mix; however, that is where the similarity ended. The first was square and appeared to have been poured into an open excavation. The second was round and had been poured into a precast concrete form. At the center of each feature there was a small square outlined in grout, a mixture of light aggregate (usually perlite, i.e., expanded mica) and portland cement. Grout is generally used to level an area where a steel column is to be placed.

Investigation of the circular feature revealed that the precast form was actually a rusted concrete sewer pipe. The pipe was set vertically in an excavation, concrete poured inside, and earth filled around it. This provided the builder with an unusually strong column base at relatively little expense. The reuse of building materials has been quite common throughout the history of the building industry. Michelangelo robbed marble from the Colosseum in Rome to construct some of his more elaborate tombs. The Navajo have robbed wood from earlier structures to construct their pueblos. One may only guess how many Victorian fireplace mantels have been forced into modern condominiums. While the recycling of materials is far superior to complete waste, it often causes problems in interpretation. Fortunately, there was little problem in this case.

The intrusive features appear to have been part of the structure represented by Features 1 and 5. Their location and spacing indicate that they represent interior support columns. (See Figure VIII.) Warehouse space represents money; therefore, it is not wasted. A structure the size of the one represented on the 1949 Sandborne map would obviously require some interior support. Steel columns such as those indicated by the located bases would give the necessary support with little wasted space. As previously stated, this warehouse was rather late. One only has to look at a modern warehouse to visualize what it looked like. There is little question why there was no record kept of the design. The structure was meant to be used, not look pretty.

Given the restraints that were placed on the project, there was an incredible amount of information recovered. Historical research indicated numerous structures on the lot. Archeological investigation located four of these. This is not to say that there were not more remains present on the site. There probably were; however, this was, from its inception, a salvage project. Some areas were tested while others were not. Considering the amount of information that was recovered, under very difficult conditions, one can only imagine what would have been discovered if sufficient time had been available.

CONCLUSIONS

The Seaboard Site appears to have been located in one of the most dynamic areas of Raleigh. The amount of material deposited and the number of structures evidenced on the lot indicates that there was a great deal of human activity taking place there over a long period of time. This site is a clear indication that first impressions are often deceiving. When the project began, there was nothing visible but a well graded parking lot, interrupted by the Seaboard Office Building. All indications were that the area to be investigated had been graded well below its original level. There was a high bank on the east side of the site. Halifax Street, one of the original main streets in Raleigh, was several feet higher than the parking lot. The obvious conclusion was that material had been removed to bring the lot to its present level.

As is often the case, the obvious was incorrect. The excavations indicated that there had been an incredible amount of filling activity on the site. Halifax Street had been built up rather than the parking lot graded down. Much of the fill material, being industrial waste, had been produced on the site. With modern electric and diesel locomotives, it is difficult to imagine the amount of waste produced by coal and wood burning boilers. Hauling such material away would have been quite expensive and time consuming. Therefore, the material was simply spread around the lot or piled in unused sections of the lot.

Soil build-up on an industrial site is much greater than on a domestic site. Where with the latter, deposits of one foot may take a number of years to accumulate, the former may have deposits of up to ten feet within one hundred years. Some of the early iron furnaces excavated in England evidenced a build-up of over twelve feet. While the accumulation on the Seaboard Site was by no means as dramatic, approximately four feet, the disposal of waste cinder and ash on the site was largely responsible for the amount of material left intact.

The detail of the information recovered from the site came as a complete surprise. Some rather tenuous remains were expected and perhaps a few artifacts which might help interpret structures' usage. Even though the project was operated on an emergency basis with little time for planning, data recovery was excellent. The remains of four structures were investigated, including those of the Seaboard Office Building which were above grade. The vast majority of the actual excavation was accomplished with a backhoe. Hand excavation was utilized only when significant features were located. Even with this admittedly crude methodology, large numbers of intact remains such as bottles, machinery parts, and rather fragile freight were recovered.

As may be expected, the contextual information was limited, especially vertically. The data recovered would have been much more valuable if it had been possible to use more conventional excavation techniques. However, it was possible to assign most artifacts to the interior or exterior of a specific structure. In many cases, as with Feature 3, it was possible to relate the recovered material to a specific area within the structure. This was extremely fortunate as it allowed the determination of differential space use throughout the structure.

While the artifacts that were recovered could only be used to a limited degree, their number and type were quite interesting. The expected machinery parts, nails, and building materials were present in large numbers, as were the freight remains. There were large numbers of pint and half-pint liquor bottles, indicating that transients frequented the area. The most interesting variety of artifact present on the site was the domestic material. While the numbers were fairly small, several varieties of ceramics and fine crystals were the most puzzling. The ceramics might have been freight that had broken during shipment. However, crystal is usually well packed, and the crates are not opened until the shipment arrives at its destination. Since the conditions that the material was recovered under were rather crude, the presence of this material must remain an enigma. Future excavations, however, on industrial sites should consider the likelihood of finding such material and attempt to discover the process by which it arrived.

It was possible to determine the approximate date of construction for each of the structures that was investigated. This was accomplished by using a combination of historical research and archeological investigation. The cross-referencing of these two streams of data allowed a more complete interpretation of the site than would have been possible if only one discipline had been used. Documentary research of the site yielded the construction period of some of the structures. However, only by comparing the construction techniques of the documented structures with those of other buildings was it possible to determine dates for certain buildings.

The best documented structure, the Seaboard Office Building, was also the most accessible to the investigators. The records indicated that it was constructed between 1860 and 1862. Construction techniques included brick footings and six to one American bonding. The second of the structures, Feature 3 in Figure VIII, also had brick footings and six to one American bonding. This seemed to indicate that the two structures were built about the same time. The relative elevation of the two structures seemed to indicate that Feature 3 may have been slightly older than the office building. Subsequent research has shown that the probable construction date for Feature 3 was about 1840. It is interesting to note that construction techniques

had changed very little in the years between the construction of the two buildings.

Feature 2 was constructed after the two buildings previously discussed. The excavated section of this structure was slightly higher and cut through Feature 3, a clear indication that it was built after that structure. The construction techniques were also different. Rather than having brick footings, poured concrete footings were present. The footings were unusual in that the concrete had been formed up rather than simply poured into an excavation as present construction practice dictates. This would seem to indicate that, while the structure represented was not as old as the two buildings previously discussed, it was by no means modern.

Written documentation on this structure was also rather weak. The building is represented on the 1872 Bird's Eye View of Raleigh, but it was probably built somewhat earlier. The evidence indicates a drastic shift in construction techniques in the ten years between 1860 and 1870. Concrete had become more readily available, and it was possible to substitute pouring a footing for the more time consuming practice of laying them up with brick. The concrete was also a good deal stronger.

The presence of the two sets of warehouse remains, one cutting through the other, also yields some evidence about the life expectancy of an industrial building in Raleigh. It would appear that Feature 2 was constructed to replace Feature 3. With a probable construction date of about 1870, the earlier structure lasted about thirty years. While this might seem a relatively short life span, these structures were subjected to extremely heavy usage and were not given the care showered on the office building. Buildings of this type were built quickly, used hard, torn down, and replaced when necessary. Repair of a warehouse would be given a lower priority than that of the office building or the rolling stock and track.

The last excavated structure to be discussed was extremely modern. In fact, some of the visitors to the excavation remember it standing. As it was of such late origin, relatively little time was spent on researching and interpreting it. The construction techniques were extremely modern, concrete footings poured into excavations and modern machine made brick. The various concrete column pads located on the interior indicate an open design that would not be possible without the availability of steel. The grout markings on the two pads previously discussed would support this hypothesis. The structure was represented on a 1949 insurance map as a warehouse, but it was probably built somewhat earlier. Local informants suggested that the structure was torn down to make room for the parking lot. It would seem that parking takes a high priority in this area, as the entire project was instigated by the planned construction of a parking garage.

As previously indicated, there were other structures on the lot. The documentary research was able to identify their approximate location and probable use; however, little could be determined about the construction techniques and materials used. Only archeological excavation could supply such detailed information. Unfortunately, there was not sufficient time to investigate every structure on the lot. While such data may seem tedious to recover, and completely unnecessary, it is such detail, often gleaned from several structures, which allows accurate restoration or reconstruction of historically significant structures around the state.

Throughout this report, there have been references to the lack of time to properly excavate the site. While this is an extremely unfortunate fact of life, the opportunity to recover any information at all was greatly appreciated. It would have been impossible to delay the construction project long enough to mount a full investigative project. The only viable solution was salvage. The information collected was not gathered under ideal conditions, but it is data that would have been irrevocably lost had an attempt not been made.

It is hoped that the material recovered from this excavation will point out the need to consider seriously the archeological resources in downtown and industrial areas. In the past, such areas have been written off as having no resources present. It has been thought that continued construction activities in these areas have destroyed any remains. The Seaboard Site is a clear indication that a great deal of construction activity may still leave behind a large quantity of archeological evidence. The very nature of industrial sites precludes any detailed descriptive archival data. The structures were not pretty, or architecturally interesting. They were constructed to be used; as such, they were far from eye catching. The only way to recover the detail necessary to understand such structures is historical research conducted with an archeological excavation.

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